Abstract:

Title: The effect of Low Level laser Therapy (LLLT) on the improvement of dry socket pain.

Introduction: Dry socket is one of the most prevalent complications after tooth extraction, and various studies have confirmed LLLT,s effect on it. This study also aims to effect of Low Level laser Therapy (LLLT) on the improvement of dry socket pain.

Materials and Methods: In this clinical trial, 60 patients with dry socket diagnosis of mandibular third molars were selected and randomly divided into two groups of 30. In the first group, the laser received placebo in three sessions (day one, three, six); In the second group, a GaAl laser with a wavelength of 635 nm with a frequency of 20000 Hz and 15 J and a pulse duration of 0.05 ms for 3 sessions (day 1, 3, 6) was performed on patients. The patient also reported pain on a daily basis for up to 3 days with a visual analog scale (VAS). Finally, the data were analyzed using SPSS software version 22.

Results: The results of this study showed that the mean of dry socket pain was almost same in the placebo group at different times, which was not statistically significant; but in the experimental group, the mean pain intensity decreased with use of Low Level laser Therapy (LLLT), which was statistically significant. Also, the interactive effects between these two variables showed that the Experimental practice (using LLLT) in interaction with time has a significant effect on Dry Socket pain ($P \leq 0.05$).

Conclusion: In Overall, the results of this study showed that pain reduction in patients with dry socket treated with low-level laser therapy they were significantly more than those treated with placebo; therefore, prescribed low-level laser Therapy Compared to traditional treatments by dentists can be used as a good alternative to reducing of Dry socket pain.

Keywords: Low Level laser Therapy, dry socket.